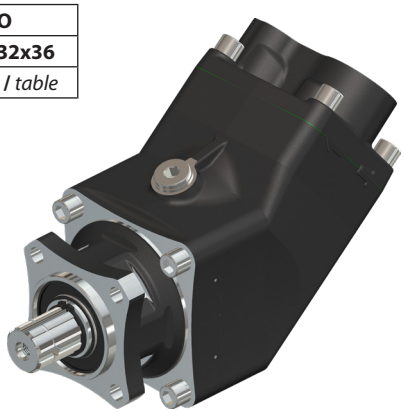
Pompe a pistoni ad asse inclinato doppia mandata
Double delivery bent axis piston pumps
TWIN FLOW

604001

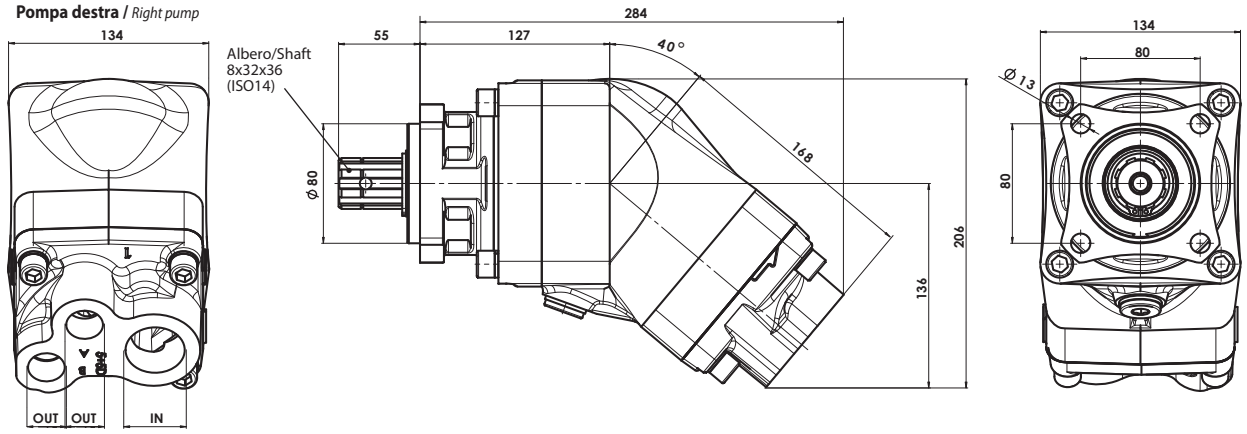
Flangia / *Flange*	**ISO**
Albero / *Shaft*	**ISO 8x32x36**
Cilin. / *Displ.*	**tabella** / *table*



Fluido idraulico / *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals: FKM, FPM, HNBR*				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -40	-40÷10	10÷35	> 35
	VG (cSt = mm²/s)	16	22	32	46
Viscosità cinematica ottimale di esercizio *Optimale kinematic viscosity*	VG= 10 cSt ÷ 100 cSt				
Viscosità cinematica max consentita all'avviamento *Max kinematic viscosity suggested at the start-up*	VG= 750 cSt				
Indice di viscosità consigliato *Viscosity index suggested* VI > 100	Temperatura di esercizio *Working temperature* -40°C ÷ 140°C				
Grado di filtrazione / *Oil filtering*	> 200 bar: 10 µm / < 200 bar: 25 µm				
Pres. di aspirazione / *Inlet pressure*	0,85 ÷ 2 bar assoluti/*absolut*				
Senso di rotazione / *Pump rotation*	Unidirezionale / *Unidirectional*				
Verificare che la pompa sia posizionata almeno 100 mm sotto il livello minimo del serbatoio olio. Prima di avviare la pompa effettuare spurgo aria. *Verify that pump is, at least, 100 mm under the minimum level of the tank. Before starting the pump bleed the air.*					

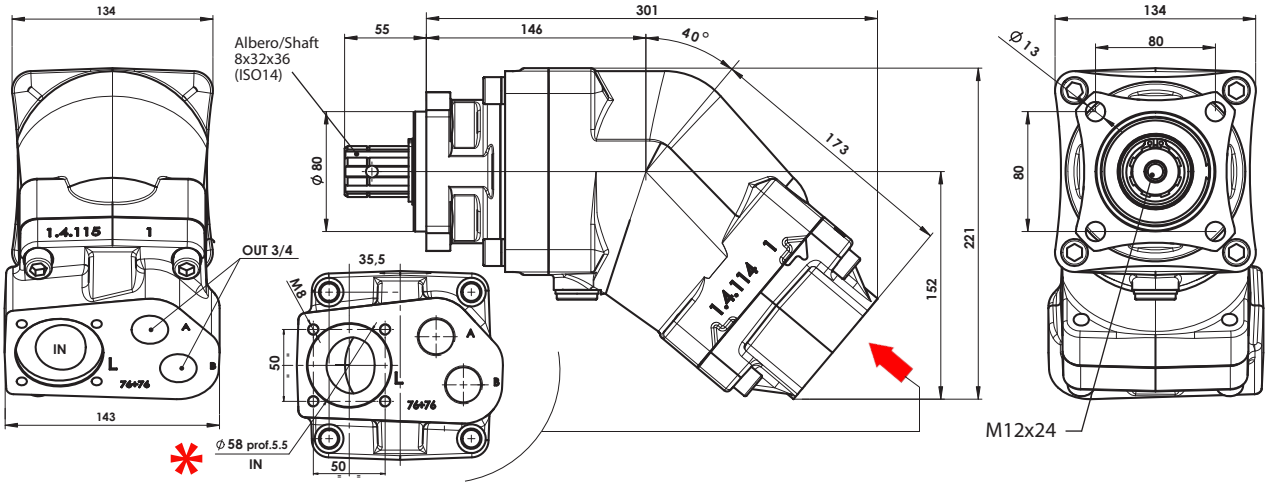
Ingombro / *Dimension* 53+35 53+53 70+35 70+53

Pompa destra / *Right pump*



Ingombro / *Dimension* 76+76

Pompa sinistra / *Left pump*

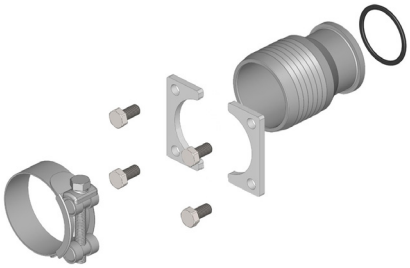


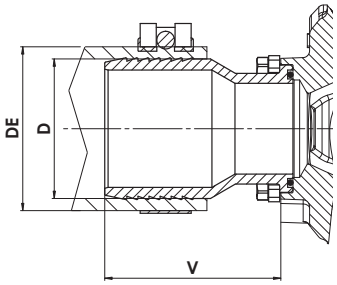
Tipo pompa *Pump type*	Rotazione *Rotation*	Codice *Code*	Gruppo corpo posteriore* *Rear cover assembly**	IN *ISO 228*	OUT *ISO 228*	Peso *Weight*
TWIN FLOW 53+35	Destra / *Right*	**60400115033**	50002995101	G 1 1/4"	G 3/4"	19,5 kg
	Sinistra / *Left*	**60400115039**	50002995209			
TWIN FLOW 53+53	Destra / *Right*	**60400115053**	50002995307	G 1 1/4"		20 kg
	Sinistra / *Left*	**60400115059**	50002995405			
TWIN FLOW 70+35	Destra / *Right*	**60400117033**	50002997001	G 1 1/4"		20,5 kg
	Sinistra / *Left*	**60400117039**	50002997109			
TWIN FLOW 70+53	Destra / *Right*	**60400117053**	50002997403	G 1 1/2"		21 kg
	Sinistra / *Left*	**60400117059**	50002997501			
TWIN FLOW 76+76	Destra / *Right*	**60400117673**	50002997618	Ø58 *		24,5 kg
	Sinistra / *Left*	**60400117679**	50002997609			

* Per modificare il senso di rotazione della pompa, da rotazione **DESTRA IN SINISTRA, O VICEVERSA**, è necessario sostituire il corpo posteriore.
** To change the pump rotation, the rear body must be replaced.*

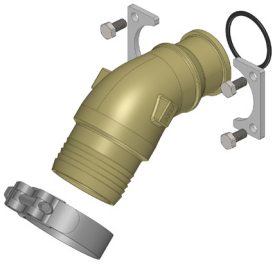
Raccordi validi SOLO per Twinflow 76+76 / *Fittings suitable for Twinflow 76+76 ONLY*

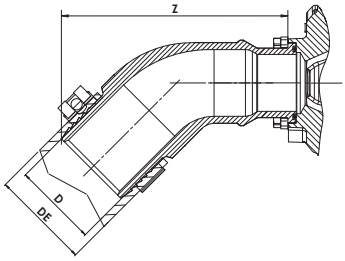
Codice *Code*	D *mm*	DE *mm*	V *mm*	Peso *Weigth* *Kg*
15511200507	50	60-63	59	0,59
15511200516	50	64-67	59	0,6
15511200605	60	68-73	79	0,77
15511200632	63	74-79	79	0,8
15511200767	76	86-91	94	1



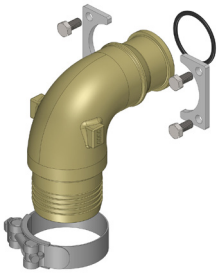


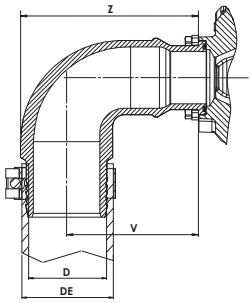
Codice *Code*	D *mm*	DE *mm*	Z *mm*	Peso *Weigth* *Kg*
15511245639	63	74-79	163	1,75
15511245764	76	86-91	167	2,1



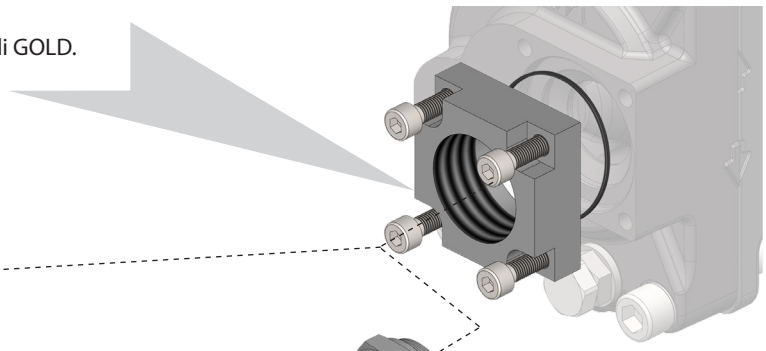


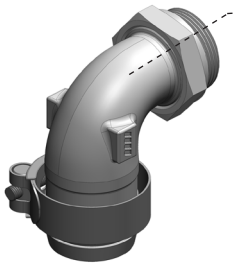
Codice *Code*	D *mm*	DE *mm*	V *mm*	Z *mm*	Peso *Weigth* *Kg*
15511290634	63	74-79	103	139	1,9
15511290769	76	86-91	103	140	2,3

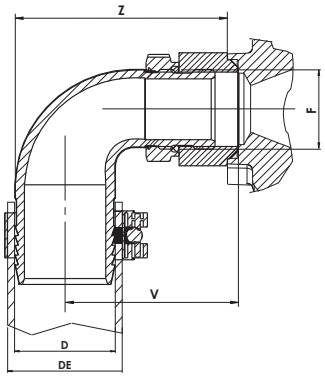


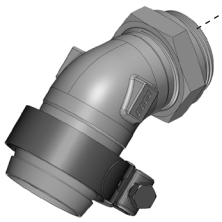


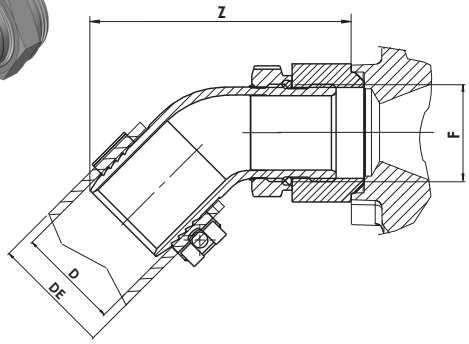
15511300408
Kit flangia foro filettato G1-1/2, per montaggio raccordi GOLD.
Flange kit G1-1/2 threaded hole, for mounting GOLD fittings.











Codice *Code*	F *ISO 228*	D *mm*	DE *mm*	V *mm*	Z *mm*	Peso *Weigth* *Kg*
15510000592	G1-1/2	50	60-63	85	114	0,99
15510000609			64-67			1
15510000654		60	68-73	88	123	1,06

Codice *Code*	F *ISO 228*	D *mm*	DE *mm*	Z *mm*	Peso *Weigth* *Kg*
15509000540	G1-1/2	50	60-63	133	0,79
15509000559			64-67		0,82
15509000611		60	68-73	153	1

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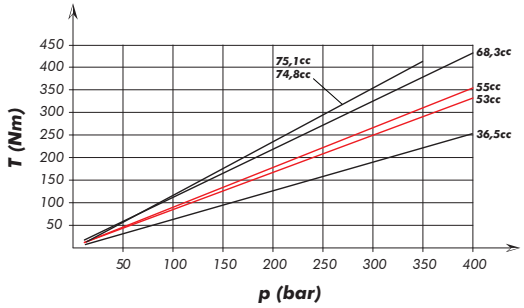
Caratteristiche tecniche funzionamento *Technical features*		**53+35**	**53+53**	**70+35**	**70+53**	**76+76**
Cilindrata A / *Displacement*	*(cc/rev)*	36,5	53	36,5	53	75,1
Cilindrata B / *Displacement*	*(cc/rev)*	55	55	68.3	66,2	74,8
Pressione massima continua / *Max. continuous pressure*	*(bar)*	350	350	350	300	300
Pressione massima picco / *Max. peak pressure*	*(bar)*	400	400	400	350	350
Velocità massima a vuoto / *Max. speed without load*	*(rpm)*	2550	2550	2550	2550	2550
Velocità massima con uscita A e B in press. *Max. speed with load on A and B outputs* (*)		1800	1800	1800	1650	1500
Velocità massima con 1 porta in press. *Max. speed with load on 1 output only* (*)		2100	2100	2100	2100	2100
Potenza massima continua / *Max. continuous power*	*(kW)*	94	111	108	98	110
Potenza massima intermittente / *Max. intermittent power*	*(kW)*	107	127	123	114	129

Pressione massima continua *Max. continuous pressure* (100%)
Pressione massima di punta *Max. peak pressure* (6 sec.max)

(*) Velocità con tubo diam. interno 63mm (2"1/2) minimo.
Speed with pipe internal diameter 63mm (2"1/2) minimum.

Coppia teorica assorbita / *Theortical drive torque*

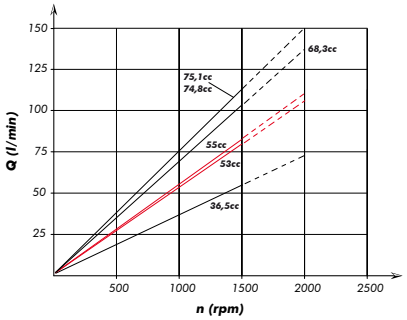


La coppia assorbita dalla pompa deve essere calcolata come somma delle coppie necessarie per mandare in pressione le 2 mandate.
The total torque absorbed by the pump is given by the sum of the torques necessary to give pressure to the pressure ports.

Pompa 53+53 e 70+35: con tubo diam. interno 50mm (2") velocità max. 1200rpm.
Pump 53+53 and 70+35: with pipe internal diameter 50mm (2") max. speed 1200rpm.

Pompa 70+53: solo con tubo diam. interno 63mm (2"1/2).
Pump 70+53: only with pipe internal diamater 63mm (2"1/2).

Portata teorica / *Theoretical flow*



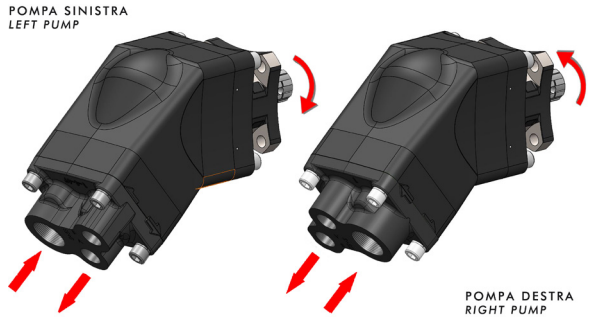
La portata della pompa è pari alla somma delle portate delle 2 mandate.
The total pump flow is given by the sum of the flow of each pressure port.

Potenza teorica assorbita / *Theoretical power input*

La potenza totale è pari alla somma delle potenze richieste dai singoli utilizzi sulle 2 mandate.
The total power absorbed by the pump is given by the sum of the power required by the two pressure ports.

$$P_{TOT} = P_A + P_B = \frac{(p_A \cdot Q_A + p_B \cdot Q_B)}{612}$$

P [kW]
Q [l/min]
p [bar]



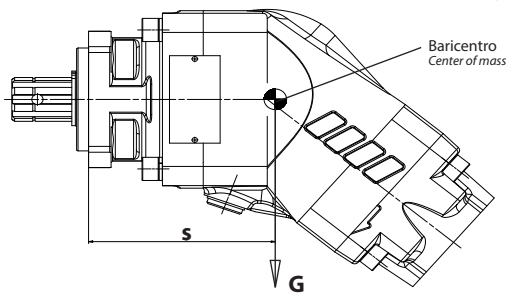
Scelta del tubo di aspirazione
How to choose the suction pipe size

Q Portata *Flow*	Ø interno min. tubo *Minimum pipe diameter*		Velocità flusso *Flow speed*
l/min	*mm*	*inch*	*(m/s)*
30	32	1" 1/4	0,62
40	32		0,83
50	38	1" 1/2	0,74
60	38		0,88
70	40	1" 9/16	0,93
80	45	1" 3/4	0,84
90	45		0,94
100	50	2"	0,85
110	50		0,93
120	60	2" 3/8	0,71
130	60		0,77
140	60		0,83
160	63	2" 1/2	0,86
170	63		0,91
180	63		0,96

Per garantire corrette condizioni di aspirazione la velocità del flusso non deve superare 1m/sec.
To ensure the proper suction pipe size the flow speed should not exceed 1mt/sec.

Momento peso / *Mass moment*

$M_{amm.} = s \times G$ (Nm)



G=Peso in N
(Peso in Kg x 9.81)
***G**=Weight in N*
(Weight in Kg x 9.81)

	s
53+35	126,2
53+53	125,9
70+35	126
70+53	127,1
76+76	143

Link:
Ricambi/*Spare parts*